

## REMARKS

Claims 1-19 are pending in the present application.

Claims 1-19 are believed to be in condition for allowance for the reasons set forth herein.

### Preliminary Comments

Applicants previous arguments filed November 4, 2003 are considered to be non-persuasive. Applicants have opined that the combination of silica particles in a cation modified polyvinyl alcohol will not inherently produce silane modified polyvinyl alcohol. This position has been held by the Office without support.

The Office even cites Mochizuki et al. wherein stated at col. 5, lines, 22-25 is the disclosure:

"The layer containing solid fine particles in the invention contains the above polyvinyl alcohol or cation-modified polyvinyl alcohol in an amount of preferably 60% or more by weight, more preferably 80 to 100% by weight based on the total hydrophilic binder weight."

There is no teaching to support the position taken by the Office that this combination of a solid and a polymer will inherently produce silane modified polyvinyl alcohol. Silica, also known as sand, is known to be stable and physically combining silica with a plastic would not be expected to inherently form any reaction product.

Furukawa et al. is newly cited. The previous amendments substituted equivalent terms of art therefore no new grounds of rejection were required. A final rejection based on Furukawa et al. is therefore improperly based on new art cited by the Office to reject a claim of identical scope. Withdrawal of the finality is respectfully requested.

Claim Rejections - 35 USC § 103

Claims 1-3, 5-10 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al.

Mochizuki is cited as disclosing an ink-jet recording sheet comprising silica or silicate particles dispersed in a cation-modified polyvinyl alcohol which is argued to inherently produce by silicon/silanol/silane modified polyvinyl alcohol. Applicants have, and continue to, disagree with this position. Furthermore, the silane modified polyvinyl alcohol is no longer claimed and has been replaced with a hydrolyzed copolymer of vinylacetate and silane monomer.

The Office states that Mochizuki et al. does not expressly disclose a hydrolyzed copolymer of vinylacetate and silane monomer. Applicants are at a loss as to how to further argue a rejection based on a teaching of silane modified PVA

when the Office admits that a hydrolyzed copolymer of vinylacetate and silane monomer is not taught. Silane modified PVA is a hydrolyzed copolymer of vinylacetate and silane monomer. In one instance the Office opines that the compound is taught based on an inherent reaction and in the other instance states that the compound is not taught.

Furukawa et al. is cited as teaching hydrolyzed copolymers of vinyl ester such as vinyl acetate with polyvinyl alcohol in the ink receiving layer. Furukawa is also cited as teaching silane monomers. The silane monomers are taught as cross-linkers which typically react as a film is dried down. The Office is apparently of the opinion that a polymer cross-linked with a silane is the same as a copolymer comprising silane monomers therein. Applicants respectfully disagree with this position. Assuming, *arguendo*, that the position of the Office were accepted the cross-linked polymer would still not represent a hydrolyzed copolymer as set forth in claim 1. Furukawa et al. does not teach a silane modified PVA or a hydrolyzed copolymer of vinylacetate and silane monomer even though some of the starting components are taught. The argument is extended to cross-linking with specific silanes as taught in claim 17.

The Office opines that Mochizuki teaches a modified polyvinyl alcohol containing silica particles having a

modification degree of 0.1 to 10 mol percent. The Office then incorrectly states that the silanol modified polyvinyl alcohol is formed inherently and that the silanol modification degree is therefore equivalent. Since Mochizuki does not form the silanol modified polyvinyl alcohol this argument has no basis in fact.

Furukawa et al. is further cited as teaching the cationic binder of claims 9 and 10. The combination of claim 1 is not taught and therefore the further limitations of claims 9 and 10 are not taught either.

The rejection of claims 1-3, 5-10 and 17-18 is improperly based on a reaction which is assumed to be inherently based on the recitation of two starting materials even though there is no teaching to support such an inherent reaction. Applicants respectfully request that the rejection be withdrawn.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al. and further in view of USPN 5,853,540 to Niemoller et al.

Niemoller et al. is cited as disclosing the silica particle size of claim 4. Claim 4 depends from claims 1-3 and further limits claims 1-3.

Mochizuki et al. and Furukawa et al. fail to obviate claims 1-3 for the reasons set forth above. Niemoller provides no additional teaching to mitigate the deficiencies of Mochizuki et al. and Furukawa et al. and therefore the rejection is improper.

Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. in view of USPN 6,455,133 to Furukawa et al. and further in view of USPN 6,022,440 to Nordeen et al.

Nordeen et al. is cited as teaching an adhesive polymer dispersed between the support and ink receiving layer.

Claims 11-15 ultimately depend from claim 1 and further limit claim 1. Nordeen et al. fails to mitigate the deficiencies of Mochizuki et al. and Furukawa et al. The combination therefore also fails to obviate claims 11-15.

Applicants respectfully request that the rejection of claims 11-15 be withdrawn.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,238,784 to Mochizuki et al. as applied to claim 1 above, and further in view of USPN 6,214,458 to Kobayashi et al.

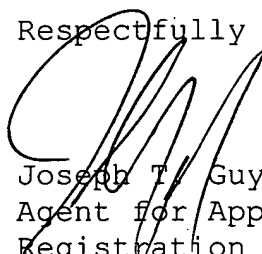
Kobayashi et al. is cited as disclosing an opaque support. Kobayashi et al. fails to mitigate the deficiencies of Mochizuki et al. as set forth previously.

The rejection is based on Mochizuki et al. in view of Kobayashi et al. The arguments are then based on Mochizuki et al. in view of Furukawa et al. and further in view of Kobayashi et al. For the purposes of clarity during appeal applicants request clarification of the rejection.

#### CONCLUSIONS

Claims 1-19 are pending. All claims are in condition for allowance. A notice of allowance is respectfully requested.

Respectfully submitted,



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